

Project Factsheet for: LaGrange Lock, Illinois Waterway (Major Rehabilitation)

Date Last Updated: 09/05/2007 09:57

Project Location Information

Location: Versailles, Illinois
River Basin(s): Illinois
State(s): IL
Congressional District(s): IL-18

Status

A Rehabilitation Evaluation Report was approved in August 2005 with an estimated total cost of \$50.3 million. A preliminary schedule of work has been developed with construction spanning over a three year period. Three lock closures will be required of approximately 30 days each with two of the three closures involving lock dewatering.

Funding for this project as a new start is not expected till FY 2009; however, once funding is available the first year of funding will be used to complete design, plans and specs, and award of a procurement contract for 9 bulkheads.

Description

LaGrange Lock, located on the Illinois Waterway at river mile 80.2, was put into service in 1939 and is in need of a major rehabilitation of lock concrete, electrical and mechanical systems. The lock went through major rehabilitation in 1986 to 1988; it included minor concrete repairs, repositioning lock machinery, and installing a traveling keel. For over 65 years the lock has been exposed to multiple freeze/thaw cycles and flooding causing a gradual but incessant degradation of the lock components. In August of 2004 an expert elicitation workshop was held to determine the probability and consequences related to the operation of LaGrange Lock with deteriorated concrete. The expert panel concluded that the lock concrete was in need of rehabilitation at the earliest possible opportunity. Bulkhead slots are needed on the downstream end of the lock to allow for lock dewatering with bulkhead sections. As there are currently no bulkhead sections available on the IWW a set would need to be procured under this project for lock dewatering during the rehabilitation.

Frequent flooding and temperature extremes combined with high usage has resulted in significant deterioration of lock concrete and the decline of mechanical and electrical systems performance and reliability. The vertical concrete has deteriorated to the point that sections have had to be removed and/or threaten to fall into the lock chamber. Barges can become wedged under the armor, resulting in a dangerous situation for deck hands and lock personnel and potential damage to the barges. Hazardous working conditions exist due to deteriorated horizontal concrete on the land and river walls of the lock chamber. The mechanical and electrical systems require constant patching and labor intensive repairs. Parts are difficult to obtain and have to be specially made in most cases. The probability of failure of the mechanical and electrical systems requiring extensive and expensive repairs in the next several years is very high. The potential at any time for an incident to occur due to deteriorated lock concrete in which the lock had to be closed for more than a week is very probable with the potential increasing every year the lock concrete is not rehabilitated.

Summarized Financial Data

	Rehabilitation	Major Maintenance
Estimated Federal Cost	\$42,600,000	\$13,400,000
Estimated Non-Federal Cost	\$0	\$0
Total Estimated Project Cost	\$42,600,000	\$13,400,000
Federal Allocations through FY 2006	\$0	\$0
Allocations for FY 2007	\$0	\$0
Budget Request for FY 2008	\$0	
Balance to Complete after FY 2008	\$42,600,000	\$13,400,000

Costs are represented in 2005 dollars

Authority

CG - Construction General --

Project Manager Information

Name: Frank Monfeli, Project Manager (Operations and Maintenance Program), Programs and Project Management Division
Phone: (309)794-5640
E-mail: Frank.C.Monfeli@usace.army.mil